

Claims

1. A method for providing services for clients associated with a data communication network, said services being
5 provided by at least one external service provider, the method comprising:
- signalling from said at least one external service provider offers that associate with services to an interface entity associated with the data network;
- 10 processing the offers at the interface entity in order to make a decision regarding the acceptance of the offers; including accepted services into a register of services that are available for the clients;
- requesting for a service from the interface entity for
15 use by one of said clients;
- processing the request by the interface entity to find a matching service from the registered services; and
- if a matching service is found, requesting for said service from an external service provider providing said
20 service by communicating a message to said external service provider based on a protocol that enables initiation of a service provisioning session.
2. A method as claimed in claim 1, wherein said protocol
25 comprises a session initiation protocol (SIP).
3. A method as claimed in claim 1, wherein said protocol comprises HyperText Transfer Protocol (HTTP).
- 30 4. A method as claimed in claim 1, wherein said protocol comprises Simple Object Activation Protocol (SOAP).

5. A method as claimed in claim 1, wherein the at least one external service providers offers the services based on said protocol.

5 6. A method as claimed in claim 1, wherein the offers are broadcast to be received by interface entities of at least two data networks.

7. A method as claimed in claim 1, wherein an
10 authentication procedure is accomplished between the interface entity of the data network and the external service provider.

8. A method as claimed in claim 1, comprising establishing
15 interfaces for the provision of the requested service based on information communicated by means of said protocol.

9. A method as claimed in claim 8, wherein said information communicated by means of the protocol the establishment of
20 interfaces between the interface entity and the external service provider without any beforehand defined interfaces for the service provisioning.

10. A method as claimed in claim 1, wherein all interfaces
25 required for providing the service connection are established based on information communicated by means of said protocol.

11. A method as claimed in claim 1, comprising a step of
modifying the requested service to be suitable for use in the
30 data network based on information communicated by means of said protocol.

12. A method as claimed in claim 1, wherein at least one of the clients comprises an application that is internal for the data network.

5 13. A method as claimed in claim 1, wherein at least one of the services comprises a call management service.

14. A method as claimed in claim 1, wherein at least one of the clients comprises an end user of the data network.

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15. A method as claimed in claim 1, wherein the services are provided based on a model that is modified from a model defined by the Parlay Group.

15 16. A method as claimed in claim 1, wherein a service discovery interface of the interface entity monitors for offers by the external service providers.

17. A method as claimed in claim 16, wherein the service
20 discovery interface discovers only selected offers.

18. A method as claimed in claim 1, wherein the interface entity sends an inquiry for a service to at least one external service provider.

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19. A method as claimed in claim 18, wherein the inquiry is broadcast to possible service providers.

20. A method as claimed in claim 1, wherein the offers by
30 the external service providers are registered in a register function.

21. A method as claimed in claim 1, wherein a charging interface of the interface entity is employed for signing of a service usage agreement.

5 22. A method as claimed in claim 1, wherein the interface entity comprises a plurality of application programming interfaces.

23. A method as claimed in claim 1, wherein the data network
10 is adapted to communicate packet data.

24. A method as claimed in claim 1, wherein the communication in the data network is based on the Internet Protocol (IP).
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25. A method as claimed in claim 1, wherein the operator of the data network pays for the use of at least one service offered by the at least one external service provider.

20 26. A method as claimed in claim 1, wherein a point-to-point like connection is established based on information communicated by means of said protocol.

27. A service interface arrangement for a data network,
25 comprising:

an interface for receiving information regarding services that are offered by at least one external service provider, said services being for use by clients associated with the data network;

30 selection means for selecting services based on said information;

agreement means for processing agreements between the data network and said at least one external service provider;

a register for services provided by said at least one external service provider, said services being selected by said selection means to be available for the clients;

request means for processing a request for a service by a client, said request means being arranged to look for a service that matches the request from the register and, if a matching service is located, to request for said service from an external service provider providing said service, wherein the request means are arranged to communicate with said external service provider based on a protocol that enables initiation of service provisioning.

28. A service interface arrangement as claimed in claim 27, comprising means for processing authentication procedures between the data communication network and the external service provider.

29. A service interface arrangement as claimed in claim 27, wherein the protocol is such that the service provisioning can be initiated without need to define beforehand specific interfaces for said service provisioning.

30. A service interface arrangement as claimed in claim 27, wherein said protocol is selected to be one of the following: a session initiation protocol (SIP); HyperText Transfer Protocol (HTTP); Simple Object Activation Protocol (SOAP).

31. A service interface arrangement as claimed in claim 27, wherein the interface is arranged to discover services from broadcast service advertisement messages.

32. A service interface arrangement as claimed in claim 27, wherein the data network comprises a packet switched data network.

5 33. A service interface arrangement as claimed in claim 27, wherein the interface entity comprises a plurality of application programming interfaces.

10 34. A service interface arrangement as claimed in claim 27 adapted to provide at least one of the following interface functions: service availability broadcasting; service lookup; service discovery; authentication; billing and/or charging; firewall; and/or gateway.

15 35. A data communication system, comprising: a data network; at least one external service provider; an interface entity for receiving information regarding services that are offered by said at least one external service provider, said services being for use by clients associated with the data network,
20 wherein the interface entity is arranged to process said information, to process agreements between the data network and said at least one external service provider, to register services that are selected among services provided by said at least one external service provider, and to process a request
25 for a service by a client to search for a service from the register that matches the request and, if a matching service is located, to request for said service from an external service provider providing said service, the arrangement being such that at least a part of the communication between
30 the interface entity and said external service provider is based on a protocol that enables initiation of service provisioning.